



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,343	01/31/2001	John T. McDevitt	5119-00529/EBM	7209

7590 05/10/2004

ERIC B. MEYERTONS
CONLEY, ROSE & TAYON, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER

FORMAN, BETTY J

ART UNIT	PAPER NUMBER
----------	--------------

1634

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

2A.

Office Action Summary

Application No.

09/775,343

Applicant(s)

MCDEVITT ET AL.

Examiner

BJ Forman

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 309-340 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 309-340 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/01; 9/03; 2/04; 4/02; 8/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Status of the Claims

1. The Preliminary Amendment filed 18 September 2001 is acknowledged.
Claims 309-340 are under prosecution.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 329 and 339 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 329 is indefinite for the recitation "the receptor" because the recitation lacks proper antecedent basis in Claim 309.

Claim 339 is indefinite for the recitation "the pump" because the recitation lacks proper antecedent basis in Claim 309.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 309, 310, 314, 316, 319, 323, 324, 326, 327, 329 are rejected under 35 U.S.C. 102(b) as being anticipated by Michael et al (SPIE, 1998, 3270: 34-40).

Regarding Claim 309, Michael et al disclose a system comprising a body (page 35, Fig. 1) a sensor array system positioned within the body and comprising a light source (Hg-Xe lamp "N"), a sensor array comprising a supporting member (optical imaging fiber "E") and at least one cavity (Fig.3) a particle positioned within the cavity which is configured to produce a signal when interacting with an analyte (page 36, paragraphs 1-2) and a detector (CCD camera "A") wherein the light source and detector are positioned such that light passes from the light source to the particle and onto the detector during use (Fig. 1).

Regarding Claim 310, Michael et al disclose the system wherein the array is positioned within a cartridge removable from the body (capillary tube (enlargement); v-grove fiber holder "D" and/or xy-positioner "F", Fig. 1).

Regarding Claim 314, Michael et al disclose the system further comprising a fluid cartridge coupled to the sensor and array (capillary tube (enlargement), Fig. 1). The instantly

Art Unit: 1634

claimed "fluid cartridge" is not defined as having any structural elements. Therefore the cartridge is given the broadest reasonable interpretation to encompass any structural element containing fluid.

Regarding Claim 316, Michael et al disclose the system further comprising a global positioning system (xy-positioner "F", Fig. 1).

Regarding Claim 319, Michael et al disclose the system wherein the detector comprises a color detector (CCD color camera "A").

Regarding Claim 323, Michael et al disclose the system further comprising a fluid delivery system coupled to the body (capillary tube (enlargement), Fig. 1). The instantly claimed "fluid delivery system" is not defined as having any structural elements. Therefore the system is given the broadest reasonable interpretation to encompass any structural element that delivers fluid to the sensor array.

Regarding Claim 324, Michael et al disclose the system wherein the detector comprises a CCD ("A").

Regarding Claim 326, Michael et al disclose the system wherein the system comprises a plurality of particles positioned within cavities and configured to "substantially" simultaneously detect a plurality of analytes (page 38, last paragraph).

Regarding Claim 327, Michael et al disclose the system wherein the particles range from about 0.05 to 500 microns (page 36, last paragraph).

Regarding Claim 329, Michael et al disclose the system wherein the particle further comprises a first and second indicator (i.e. ratio of two or more dyes) wherein interaction of a receptor with the analyte cause indicators to interact such that a signal is produced (page 38, last paragraph and Fig. 7).

6. Claims 309-311, 315-324, 326-328, 331, 333-336 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Stabile et al (U.S. Patent No. 5,872,623, issued 16 February 1999).

Regarding Claim 309, Stabile et al disclose an apparatus comprising a body comprising a sensor array system, the system comprising a light source, a sensor array comprising a supporting member having at least one cavity, a particle positioned within the cavity (Column 15, lines and Fig. 9) and a detector wherein the light source and detector are positioned such that light passes from the light source to the particle and onto the detector (Column 10, lines 13-33 22-49 and Fig. 2).

Regarding Claim 310, Stabile et al disclose the apparatus wherein the sensor array is positioned (i.e. docked) within a cartridge (e.g. gasket) which is removable from the body (Column 14, lines 1-9).

Regarding Claim 311, Stabile et al disclose the apparatus further comprising a sample input port coupled to the sensor array whereby samples are introduced into the port to the sensor (Column 13, line 54-Column 14, line 1).

Regarding Claim 315, Stabile et al disclose the apparatus further comprising an electronic controlled coupled to the sensor, light source and detector (Column 1, lines 52-Column 2, line 17).

Regarding Claim 316, Stabile et al disclose the apparatus further comprising a global positioning system i.e. motor coupled to the substrate, light and detector (Column 3, lines 36-40).

Regarding Claim 317, Stabile et al disclose the apparatus further comprising a data transfer system i.e. the controller collects data from the array and transfers the data to data storage registers (Column 1, lines 53-67 and Column 2, lines 41-44).

Art Unit: 1634

Regarding Claim 318, Stabile et al disclose the apparatus wherein the detector detects a single emission wavelength whereby the detector is monochromatic (Column 10, lines 30-32).

Regarding Claim 319, Stabile et al disclose the apparatus wherein the detector comprise a color detector i.e. detects wavelengths of 350 to 1100 nm (Column 12, lines 36-37).

Regarding Claim 320, Stabile et al disclose the apparatus wherein the light source comprises at least one light-emitting diode (Column 10, line 64-Column 11, line 8).

Regarding Claim 321, Stabile et al disclose the apparatus wherein the light source comprises a light-emitting diode (Column 10, line 64-Column 11, line 8).

Regarding Claim 322: The claim is drawn to the apparatus having a weight which allows it to be carried by an operator. However, the claim does not define the weight; the claim does not define the "operator"; the claim does not require the apparatus be completely assembled while being carried; and the claim does not define the meets and bounds of the term "carried" (i.e. is the carrier an operator driven forklift?). Because the claim does not define or describe these elements, the claim is given its broadest reasonable interpretation to encompass any weight.

Regarding Claim 323, Stabile et al disclose the apparatus further comprising a fluid delivery system (Column 13, line 54-Column 14, line 9).

Regarding Claim 324, Stabile et al disclose the apparatus wherein the detector comprises a charge-coupled device (Column 3, lines 7-11).

Regarding Claim 326, Stabile et al disclose the apparatus comprises a plurality of particles in cavities and the system is configured to "substantially" simultaneously detect a plurality of analytes i.e. within 1 second (Column 3, lines 62-65).

~~Regarding Claim 327, Stabile et al disclose the apparatus wherein the particle ranges from about 0.05 microns to about 500 microns (Column 15, lines 40-49).~~

Regarding Claim 328, Stabile et al disclose the apparatus wherein the volume of the particle changes when contacted with fluid i.e. swells (Column 15, lines 40-49).

Art Unit: 1634

Regarding Claim 331, Stabile et al disclose the apparatus wherein the supporting member comprises silicon (Column 16, lines 39-40).

Regarding Claim 333, Stabile et al disclose the apparatus comprises a barrier over the cavity i.e. window array (Column 10, lines 33-46). The barrier of Stabile et al is positioned over the cavity (Fig. 4). While the cited passages do not teach the claimed function of the barrier (i.e. inhibit dislodgement of the particle during use) the intended use or function of a structural element does not define the structural element over the prior art.

The courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure rather than function see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525,1528 (Fed. Cir. 1990) (see MPEP, 2114).

Regarding Claim 334, Stabile et al disclose the apparatus comprises a transparent barrier over the cavity i.e. window array positioned at a fixed distance (Fig. 4 and Column 10, lines 33-46).

Regarding Claim 335, Stabile et al disclose the apparatus wherein the supporting member comprises plastic (Column 16, lines 39-40).

Regarding Claim 336, Stabile et al disclose the apparatus wherein the supporting member comprising a dry film photoresist (Column 16, lines 62-67).

Art Unit: 1634

7. Claims 314, 325, 332, and 337-340 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Stabile et al (U.S. Patent No. 5,872,623, issued 16 February 1999) as defined by Zanzucchi et al (U.S. Patent No. 5,846, 396, issued 8 December 1998).

Regarding Claim 314, Stabile et al disclose the apparatus comprises the fluid delivery system of Zanzucchi et al (Column 14, line 54-Column 15, line 3) and Zanzucchi et al teach the system comprises a fluid cartridge e.g. reservoir (Column 26, lines 5-28).

Regarding Claim 325, Stabile et al disclose the apparatus comprises detection sites as described by Zanzucchi et al (Column 14, line 54-Column 15, line 3) and Zanzucchi et al teach the system wherein the detection site comprises particle beads comprising receptor molecules coupled to a polymeric resin (Column 23, line 44-Column 24, line 22).

Regarding Claim 332, Stabile et al disclose the apparatus further comprising channels (Column 16, lines 34-59) and having a fluid delivery system as taught by Zanzucchi et al (Column 14, line 54-Column 15, line 3) and Zanzucchi et al teach the system wherein channels are configured for fluid flow (Column 7, lines 14-45).

Regarding Claim 337, Stabile et al disclose the apparatus wherein the cavity is configured such that fluid entering the cavity passes through the supporting member i.e. the apparatus of Stabile et al utilizes the fluid delivery system of Zanzucchi et al (Column 14, line 54-Column 15, line 3) and Zanzucchi et al teach the system wherein fluid entering the cavity passes through supporting member (Fig. 5 and Column 22, line 35-Column 23, line 48).

Regarding Claim 338, Stabile et al disclose the apparatus further comprising a pump coupled to the supporting member for fluid delivery (Column 13, line 54-Column 14, line 9 and Zanzucchi et al, Column 6, lines 13-54).

~~Regarding Claim 339, Stabile et al disclose the apparatus wherein a channel is formed~~
in the supporting member and coupled to a pump such that fluid flows through the channel during use (Column 14, lines 54-64 and Column 16, lines 57-59 and Zanzucchi et al Column 7, lines 14-45).

Art Unit: 1634

Regarding Claim 340, Stabile et al disclose the apparatus comprises the fluid delivery system of Zanzucchi et al (Column 14, line 54-Column 15, line 3) and Zanzucchi et al teach the system wherein fluid comprises a vacuum (Column 23, lines 17-32). The fluid system of Stabile et al and Zanzucchi et al comprise a vacuum as required by the instant claim. While the cited passages do not teach the claimed function of the vacuum (i.e. pull fluid) the intended use or function of a structural element does not define the structural element over the prior art.

The courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure rather than function see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525,1528 (Fed. Cir. 1990) (see MPEP, 2114).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject-matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 312-313 rejected under 35 U.S.C. 103(a) as being unpatentable over Stabile et al (U.S. Patent No. 5,872,623, issued 16 February 1999) in view of Wilding et al (U.S. Patent No. 5,587,128, issued 24 December 1996).

Regarding Claims 312-313, Stabile et al disclose an apparatus comprising a body comprising a sensor array system, the system comprising a light source, a sensor array comprising a supporting member having at least one cavity, a particle positioned within the cavity (Column 15, lines and Fig. 9) and a detector wherein the light source and detector are positioned such that light passes from the light source to the particle and onto the detector (Column 10, lines 13-33 22-49 and Fig. 2) wherein the apparatus comprises the fluid delivery system of Zanzucchi et al (Column 13, lines 54-67) but they do not teach the fluid delivery system comprise an input port configured to receive a syringe or a filter.

Wilding et al teach a similar apparatus comprising a fluid delivery system wherein the system comprises an inlet port configured to receive a syringe and filter wherein the syringe permits reagent delivery while minimizing evaporation of assay components (Column 18, lines 21-30) and the filter functions to remove unwanted debris from the fluids introduced into the system (Column 22, lines 57-64). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the inlet port configuration of Wilding et al to the fluid delivery system of Stabile et al for the expected benefits of providing for reagent delivery while minimizing evaporation of assay components and provide for removal of unwanted debris from the fluids introduced into the system as taught by Wilding et al (Column 18, lines 21-30 and Column 22, lines 57-64).

10. Claims 329-330 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stabile et al (U.S. Patent No. 5,872,623, issued 16 February 1999) in view of Michael et al (SPIE, 1998, 3270: 34-40).

Art Unit: 1634

Regarding Claims 329-330, Stabile et al disclose an apparatus comprising a body comprising a sensor array system, the system comprising a light source, a sensor array comprising a supporting member having at least one cavity, a particle positioned within the cavity (Column 15, lines and Fig. 9) and a detector wherein the light source and detector are positioned such that light passes from the light source to the particle and onto the detector (Column 10, lines 13-33 22-49 and Fig. 2) wherein the light is detected from each particle i.e. detection site (Abstract) but they are silent regarding indicators whereby the particles and/or analyte is detected.

Michael et al teach a similar system comprising a body (page 35, Fig. 1) a sensor array system positioned within the body and comprising a light source (Hg-Xe lamp "N"), a sensor array comprising a supporting member (optical imaging fiber "E") and at least one cavity (Fig.3) a particle positioned within the cavity which is configured to produce a signal when interacting with an analyte (page 36, paragraphs 1-2) and a detector (CCD camera "A") wherein the light source and detector are positioned such that light passes from the light source to the particle and onto the detector during use (Fig. 1) wherein the particle further comprises a first and second indicator (i.e. ratio of two or more dyes) wherein interaction of a receptor with the analyte cause indicators to interact such that a signal is produced (page 38, last paragraph and Fig. 7) and wherein multiple encoding schemes are used microsphere-specific identification of analyte-particle interaction (page 38, last paragraph).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the particle encoding of Michael to the particles of Stabile and to provide microsphere-specific analyte detection upon signal detection at the particle or upon ~~being displaced from the receptor for the expected benefit multi-analyte detection using a~~ simple "one-step" labeling as taught by Michael (page 38, last paragraph).

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claim 309 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 309 of copending Application No.

09/775,344. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets are drawn to a system for detecting an analyte and contain almost identical components. The systems differ only in the instant systems further comprises a body wherein the sensor array is positioned. However, the instant claims do not define or describe structural elements of the claimed body. Therefore the instantly claimed "body" encompasses any structure that positions the claimed elements. Both sets of claims are drawn to "a system" comprising a sensor array, light source, particles positioned on the sensor array and a detector wherein the light source, particle and detector are aligned such that light passes from the light source, to the particle and onto the detector. The alignment alone clearly suggests the presence of a structural body as recited in the instant claims. As such, the instantly claimed "body" would have been obvious in view of the alignment required in the '344 system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claim 309 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,713,298. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets are drawn to a system for detecting an analyte and contain almost identical components. The systems differ only in the instant systems further comprises a body wherein the sensor array is positioned. However, the instant claims do not define or describe structural elements of the claimed body. Therefore the instantly claimed "body" encompasses any structure that positions the claimed elements. Both sets of claims are drawn to "a system" comprising a sensor array, light source, particles positioned on the sensor array and a detector wherein the light source, particle and detector are aligned such that light passes from the light source, to the particle and onto the detector. The alignment alone clearly suggests the presence of a structural body as recited in the instant claims. As such, the instantly claimed "body" would have been obvious in view of the alignment required in the '298 system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claim 309 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,589,779. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets are drawn to a system for detecting an analyte and contain almost identical components. The systems differ only in the instant systems further comprises a body wherein the sensor array is positioned. However, the instant claims do not define or describe

Art Unit: 1634

structural elements of the claimed body. Therefore the instantly claimed "body" encompasses any structure that positions the claimed elements. Both sets of claims are drawn to "a system" comprising a sensor array, light source, particles positioned on the sensor array and a detector wherein the light source, particle and detector are aligned such that light passes from the light source, to the particle and onto the detector. The alignment alone clearly suggests the presence of a structural body as recited in the instant claims. As such, the instantly claimed "body" would have been obvious in view of the alignment required in the '779 system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claim 309 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,680,206. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets are drawn to a system for detecting an analyte and contain almost identical components. The systems differ only in the instant systems further comprises a body wherein the sensor array is positioned. However, the instant claims do not define or describe structural elements of the claimed body. Therefore the instantly claimed "body" encompasses any structure that positions the claimed elements. Both sets of claims are drawn to "a system" comprising a sensor array, light source, particles positioned on the sensor array and a detector wherein the light source, particle and detector are aligned such that light passes from the light source, to the particle and onto the detector. The alignment alone clearly suggests the presence of a structural body as recited in the instant claims. As such, the instantly claimed "body" would have been obvious in view of the alignment required in the '206 system. The claim sets further differ in that the patent claims are further drawn to a "cover". However,

Art Unit: 1634

the instant claim language "comprising" encompasses any additional elements claimed in the patented system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claim 309 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,602,702. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets are drawn to a system for detecting an analyte and contain almost identical components. The systems differ only in the instant systems further comprises a body wherein the sensor array is positioned. However, the instant claims do not define or describe structural elements of the claimed body. Therefore the instantly claimed "body" encompasses any structure that positions the claimed elements. Both sets of claims are drawn to "a system" comprising a sensor array, light source, particles positioned on the sensor array and a detector wherein the light source, particle and detector are aligned such that light passes from the light source, to the particle and onto the detector. The alignment alone clearly suggests the presence of a structural body as recited in the instant claims. As such, the instantly claimed "body" would have been obvious in view of the alignment required in the '702 system. The claim sets further differ in that the patent claims are further drawn to a "cover". However, the instant claim language "comprising" encompasses any additional elements claimed in the patented system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1634

Prior Art

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Dickenson et al "Convergent self-encoded bead sensor arrays in the design of an artificial nose" Anal. Chem. 1 June 1999, 71(11): 2192-2198.

White et al "Rapid analyte recognition in a device based on optical sensor and the olfactory system" Anal. Chem. 1 July 1996, 68(13): 2191-2202).

Conclusion

18. No claim is allowed.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BJ Forman, Ph.D.
Primary-Examiner
Art Unit: 1634
May 3, 2004